

**Missouri Consensus Diabetes
Management Guideline for Adults
Healthcare Provider Continuing Education (CE) Training**

Assessment & Practice Impact Answers

Thank you for completing the Missouri Consensus Diabetes Management Guideline for Adults Healthcare Provider Continuing Education (CE) Training. Participants completing the continuing education will be contacted by e-mail and asked to complete a brief on-line survey. The purpose of this survey is to determine how participants completing the CE training have used the information in their practice. We appreciate your assistance in helping DHSS to provide evidence based practice information to healthcare providers in Missouri. Your time and effort make a positive difference to the individuals you serve and the over-all public health efforts in Missouri. The following are answers to the Pre and Post-Assessment knowledge questions as well as recommendations for current practice.

1. At the conclusion of the initial appointment, the type 2 patient should be:
 - a. Scheduled for a follow-up appointment in 1 year.
 - b. Shown how to conduct a daily foot exam with explanation of appropriate foot care.
 - c. Instructed to return for a follow-up appointment in 1-2 years if <45 years of age.
 - d. Referred to see ophthalmologist or optometrist if >45 years of age.

Answer: B. At every diabetes focused visit, persons with type 2 diabetes should have his/her feet examined with their shoes and socks off as well as explanation provided on appropriate foot care. Until treatment goals are achieved, standard care should be provided at least quarterly for persons with diabetes taking insulin, and every 3-6 months for those not using insulin.
2. While conducting a visual inspection of the patient's mouth, you conclude the patient wears dentures and has foul smelling breath. The patient also complains of dry mouth and food not tasting right. Appropriate standard of care would be:
 - a. The patient should visit a dentist or periodontist annually.
 - b. Evaluation for denture cleanliness with focus on ulcerations and/or oral yeast infection.
 - c. The patient should be instructed to drink more fluids and clean dentures on a weekly basis.
 - d. The patient should be instructed to contact a dentist if symptoms persist for greater than 1 week.

Answer: B. The patient should be referred for a dental exam by a general dentist or periodontal specialist to examine for periodontal disease twice each year. When conducting a dental evaluation symptoms and complaints to pay attention to include: detection of bad breath, visual inspection for swollen or bleeding gums, loose or spreading teeth, and obvious decay. The provider should also note patient comments about conditions of dry mouth, altered taste, or any complaint focused upon the mouth.

3. To improve glycemic control, manage weight and reduce cardiovascular disease, you consult the patient on working toward a goal of:
 - a. Exercising at least 3 days/week at least for 150 minutes/week (50-70% of maximum heart rate) with no more than 2 consecutive days without physical activity.
 - b. Exercising at moderate intensity at least 100 minutes/week (achieve 25-50% of maximum heart rate).
 - c. Exercising 3 days/week for 20 minutes at a time as tolerated.
 - d. Exercising 5 days/week for 10 minutes at a time at high intensity at least 300 minutes/week (achieve 80-95% of maximum heart rate).

Answer: A. *To improve physical activity the patient should be encouraged to gradually increase the duration and frequency to 30-45 minutes of moderate aerobic activity, 3-5 days/week, with a goal of at least 150 minutes/week (50-70% of maximum heart rate). The activity should be distributed over at least 3 days/week and with no more than 2 consecutive days without physical activity.*

4. The goal for non-HDL can be established at 30 mg/dl higher than the patient's LDL cholesterol. If the patient's total cholesterol is 245 mg/dl, HDL 35 mg/dl, LDL 198 mg/dl, which of the following is correct?
 - a. The patient's non-HDL is 210 mg/dl.
 - b. The goal for non-HDL has not been met.
 - c. The non-HDL cholesterol represents the sum of the atherogenic particles that carry cholesterol.
 - d. All of the above.

Answer: D. *The National Cholesterol Education Program Adult Treatment Panel III (ATP III) Guidelines introduced new features to more accurately identify patients at risk for cardiovascular disease. The calculation for non-HDL is total cholesterol minus HDL cholesterol. Therefore, 245 mg/dl minus 35 mg/dl equals 210 mg/dl. Because the patient's non-HDL (210 mg/dl) is not 30 points higher than their LDL (198 mg/dl), the non-HDL goal has not been met. The non-HDL cholesterol represents the sum of the atherogenic particles that carry cholesterol. More information on these guidelines may be found at <http://www.nhlbi.nih.gov/guidelines/cholesterol/atglance.pdf>.*

Current Practice Assessment: Below are the answers to the current practice assessment questions provided in the Pre-Assessment portion of this CE training. These answers are based on the recommendations of the *Missouri Consensus Diabetes Management Guideline for Adults*.

1. How often does your practice inspect the feet of your diabetic patients with shoes and socks off?
 - a. Annually
 - b. Every diabetes focused visit
 - c. ONLY when the patient expresses concern regarding his/her feet
 - d. Other

Answer: B. According to the guidelines, foot inspection is recommended at every diabetes focused visit. The diabetes focused visit is one that is regularly scheduled in order to assess diabetes care treatment goals, assess management plans and identify problems that may be barriers to optimal control. Until treatment goals are achieved, standard care should be provided at least quarterly for persons with diabetes taking insulin, and every 3-6 months for those not using insulin. To facilitate foot inspection and examination during patient visits, consider posting a policy in your exam rooms such as “For all patients with diabetes, remove shoes and socks in preparation for examination.”

2. How often are the patient’s self-monitoring glucose logs reviewed by the provider in your practice setting?
 - a. Every diabetes focused visit
 - b. Annually
 - c. ONLY when patient reports severe hyperglycemia or hypoglycemia
 - d. Other

Answer: A. According to the guidelines, review of the patient’s self-monitoring blood glucose logs by the provider is recommended at every diabetes focused visit. This includes an individualized management plan to encourage persons with diabetes to reach and maintain treatment goals.

3. At what frequency does your practice obtain a glycated hemoglobin (A1c) for diabetic patients?
 - a. Annually based on the individual’s therapeutic goal
 - b. 2-4 times annually based on the individual’s therapeutic goal
 - c. Only when the patient’s self monitoring glucose logs indicate severe hyperglycemia or hypoglycemia
 - d. Other

Answer: B. According to the guidelines obtaining an A1C is recommended 2-4 times annually based on the individual’s therapeutic goal. The provider should develop or adjust the management plan to achieve normal or near-normal glycemia. Less stringent treatment goals may be appropriate for persons with diabetes and a history of severe hypoglycemia, persons with diabetes and limited life expectancies, and older adults with co-morbid conditions.

4. At what frequency does your practice currently assess kidney function by measuring albumin/creatinine ratio using a random urine sample for Type 2 patients?
 - a. Never
 - b. Annually beginning at diagnosis
 - c. Every other year
 - d. Other

Answer: B. According to the guidelines, measurement of albumin/creatinine ratio using a random urine sample is recommended annually beginning at diagnosis in Type 2 patients. In Type 1 patients, albumin/creatinine ratio using a random urine sample is recommended annually beginning 5 years after onset; and earlier if gross proteinuria is present.